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Characterication And Composition Liquied Smoke-Charcoal Compost Bamboo Sawdust as Natural Pesticide

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ABSTRACT

The research goal is to produce liquid smoke through pyrolisis process and to get fractions of potential chemical components from bamboo wastes. Results of this research are expected to give benefits as follows: (1) Liquid smoke produced from wood and bamboo wastes through pyrolisis process is able to diversify preservative products, (2) Rate reaction from value rate constanta by Pyrolitic kinetic model resulted from this process can be used to find expected compounds in large quantities. Results of pyrolisis bamboo dust gave the highest yield of liquid smokes as much as 18.18% in pyrolitic temperature of 200^{o}C. The highest acid content of results of pyrolisis of bamboo dust with electrical reactor resulted at pyrolitic temperature of 400^{o}C was 7,89%, whereas, in pyrolisis result of bamboo dust with electrical reactor was shown at pyrolitic temperature of 500^{o}C. In terms of the charcoal produced from pyrolisis process containing the highest yield was bamboo dust (33.28%), Identification of GC-MS of bamboo dust could provide compounds that mostly derived from acid group and was dominated by aceton,acetic acid,3 hidroksi 2 butanone, icocyanat acid and n butana. Change kinetic model of bamboo wastes is energy activasi bamboo. The technology of integrated bamboo vinegar-charcoal-compost production hence deserves its dissemination throughout Indonesia, as pesticide natural..

Keywords : Bamboo wastes, pyrolisis, asarkom, kinetic model , natural pesticide